AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Page 1

Before line 1 of the specification, please insert the following new section:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuing application of co-pending Application No. 10/438,915, filed on May 16, 2003, the entire contents of which are hereby incorporated by reference and for which priority is claimed under 35 U.S.C. § 120; and this application claims priority of Application No. 2002-141576 filed in Japan on May 16, 2002 under 35 U.S.C. § 119.

Pages 1-2

Please replace the paragraph bridging pages 1 and 2, commencing on the 6th line from the bottom, with the following amended paragraph:

A GPS attitude sensing system is a known example of a system for determining the heading and attitude of a mobile unit. The conventional GPS attitude sensing system uses at least three GPS antennas which are installed on a rigid mobile unit and are not

arranged in a line. The system receives radio signals from GPS satellites through the individual GPS antennas of which positions are known in a 3-axis Cartesian coordinate system, and observes carrier phase differences between the radio signals received by the individual antennas. The system then establishes an antenna coordinate system by calculating relative positions of the GPS antennas from observables of the carrier phase differences and determines the heading and attitude of the mobile unit in a specific reference coordinate system (defined by users).

Page 10

Please replace the paragraph commencing on line 17 with the following amended paragraph:

Furthermore, since the alignment angle estimation process is performed until the alignment angle approaches a ~~correct~~ unique estimated value in this invention, it is possible to estimate the alignment angle in a reliable fashion.